

Date: Tuesday, 2/26/2008 8:02:56 AM  
 User: Kim Johnston

## Process Sheet

|                         |                                     |                    |                       |
|-------------------------|-------------------------------------|--------------------|-----------------------|
| Customer :              | CU-DAR001 Dart Helicopters Services | Drawing Name :     | TIRE AND RIM ASSEMBLY |
| Job Number :            | 37649                               | Part Number :      | D32339                |
| Estimate Number :       | 11156                               | Drawing Number :   | D3233 REV B           |
| P.O. Number :           |                                     | Project Number :   | N/A                   |
| This Issue :            | 2/26/2008                           | Type :             | PURCHASED PARTS       |
| Prsht Rev. :            | NC                                  | Drawing Revision : | B                     |
| First Issue :           | / /                                 | Material :         |                       |
| Previous Run :          | 35436                               | Due Date :         | 3/20/2008             |
| Written By :            |                                     | Qty:               | 12                    |
| Checked & Approved By : | <i>AC 08 02 26</i>                  | Um:                | Each                  |
| Comment :               | Est. AC 05.03.03                    | New issue KJ/JLM   |                       |

## Additional Product

Job Number:



| Seq. #:        | Machine Or Operation: | Description :   |
|----------------|-----------------------|---|
| 1.0            | PG                    | PURCHASING  |
|                |                       | <br><b>Comment:</b> PURCHASING<br>Issue P/O: <u>5796</u> <i>CY08/02/26</i> <u>12</u><br>For D3233-9 Tire and Rim Assembly P/N: 8353T74<br>Possible Supplier: McMaster-Carr<br>Product Specification sheet is required |
| 2.0            | 8353T74               | TIRE & RIM  |
|                |                       | <br><b>Comment:</b> Qty.: 1.0000 Each(s)/Unit Total : 12.0000 Each(s)<br>Tire & Rim Assembly  |
| 3.0            | QC6                   | DIMENSIONAL CHECK   |
|                |                       | <br><b>Comment:</b> DIMENSIONAL CHECK <i>5/08/08/03</i> <u>12</u>   |
| 4.0            | PACKAGING 1           | PACKAGING RESOURCE #1   |
|                |                       | <br><b>Comment:</b> PACKAGING RESOURCE #1<br>Receive and Inspect for transit damage<br>Ensure Product Specification sheet is attached<br>Identify and Stock<br>Location: <u>ST446 ST447</u> <i>1/28/3/4</i> <u>12</u> |
| 5.0            | QC21                  | FINAL INSPECTION/W/O RELEASE  |
|                |                       | <br><b>Comment:</b> FINAL INSPECTION/W/O RELEASE <i>1/28/3/4</i> <u>12</u> <i>08/03/04</i>  |
| Job Completion |                       | <br><i>2008/3/04</i> <u>12</u>  |

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

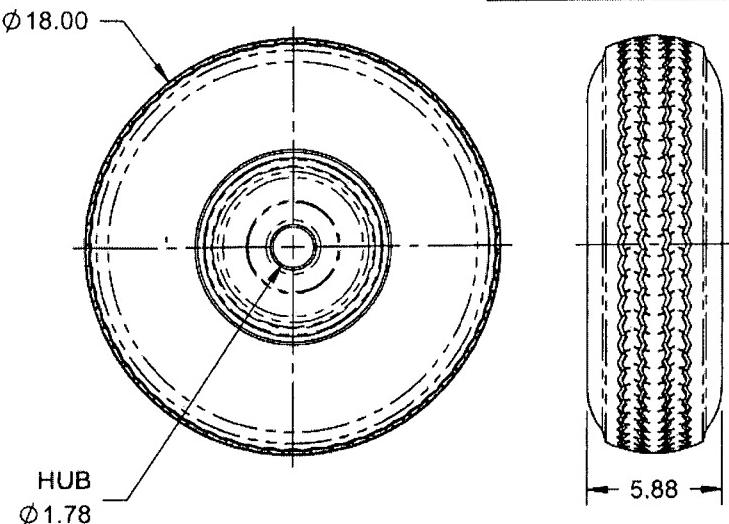
Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes  No  DQA:  Date: 08/03/04  
 QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

NOTE: Date & initial all entries

**DART**

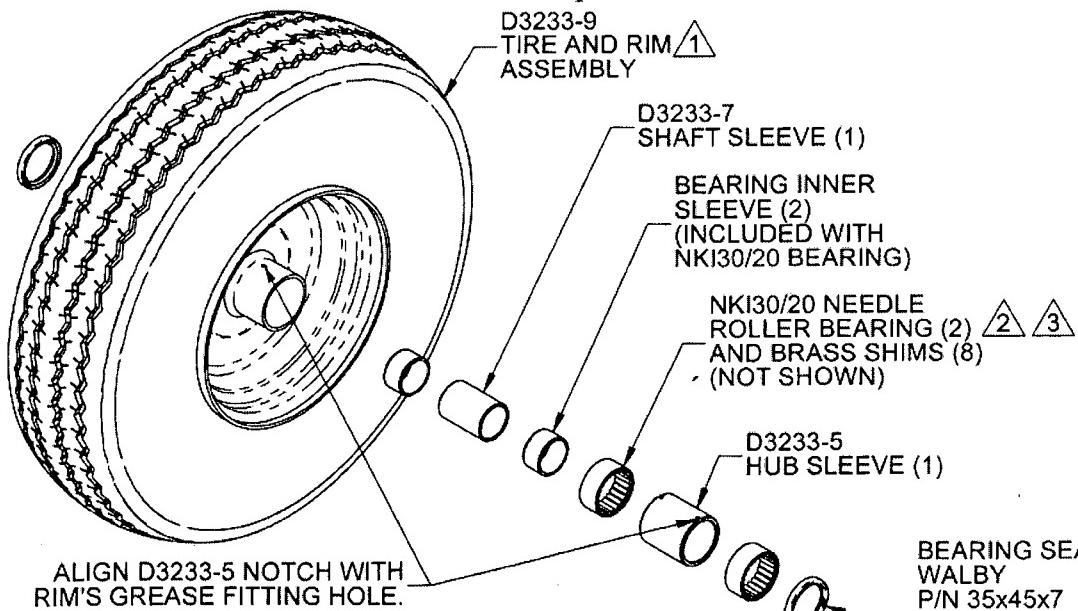
|                  |                 |  |
|------------------|-----------------|--|
| DESIGN<br>13     | DRAWN BY<br>13  | <b>DART AEROSPACE LTD</b><br>HAWKESBURY, ONTARIO, CANADA |
| CHECKED<br>PF    | APPROVED<br>DGS | DRAWING NO.<br><b>D3233</b>                              |
| DATE<br>05.03.08 |                 | REV. B<br>SHEET 1 OF 3                                   |
|                  |                 | TITLE<br><b>WHEEL ASSEMBLY</b>                           |
| A                | 05.02.18        | SCALE<br>1:1   |
| B                | 05.03.08        | ADDED BEARING SEALS                                      |



**RELEASED**  
05/05/04

| WHEEL SPECIFICATIONS                |                      |                        |
|-------------------------------------|----------------------|------------------------|
| SIZE                                | MAXIMUM LOAD         | MAXIMUM INFLATION LOAD |
| TIRE: 19.0 x 5.8<br>RIM: 5.70 x 8.0 | 910 LBS<br>(RANGE C) | 90 PSI*                |

\* MANUFACTURER'S RECOMMENDATIONS  
ARE 75 PSI FOR HIGH SPEED USE.



### D3233-041 WHEEL ASSEMBLY

#### NOTES:

- 1) POSSIBLE SUPPLIER: McMaster-Carr, P/N 8353T74
- 2) POSSIBLE SUPPLIER: GENERAL BEARING
- 3) PRESS FIT NEEDLE ROLLER BEARINGS INTO RIM HUB WITH  
(4) 0.5 X 0.75 X 0.004 BRASS SHIMS PER BEARING, (1) AT EACH QUADRANT.
- 4) POSSIBLE SUPPLIER: GENERAL BEARING
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 6) ALL DIMENSIONS ARE IN INCHES

BEARING SEAL      SHOP COPY  
WALBY      RETURN TO  
P/N 35x45x7      OR  
CR 35x45x7      ENGINEERING  
HMS4      UNCONTROLLED COPY  
P/N 13927      SUBJECT TO AMENDMENT  
(2 PLACES)      WITHOUT NOTICE  
NO. 37649

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| CHECKED | APPROVED | DRAWING NO.                                       | REV. B       |
|         |          | D3233   | SHEET 2 OF 3 |

DATE

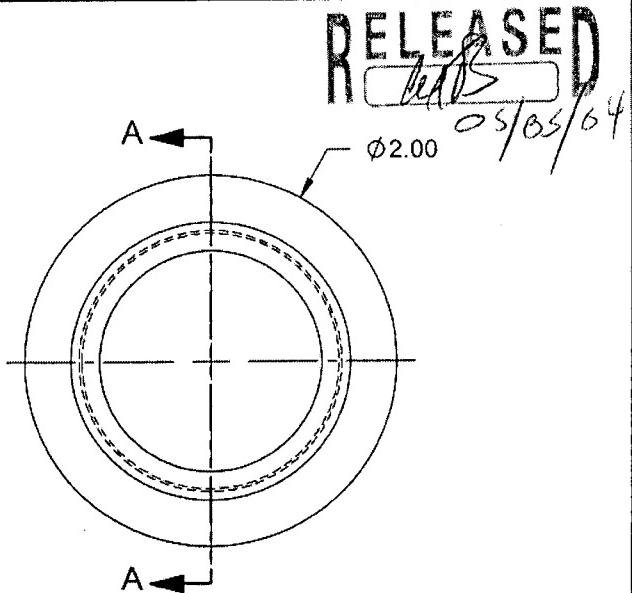
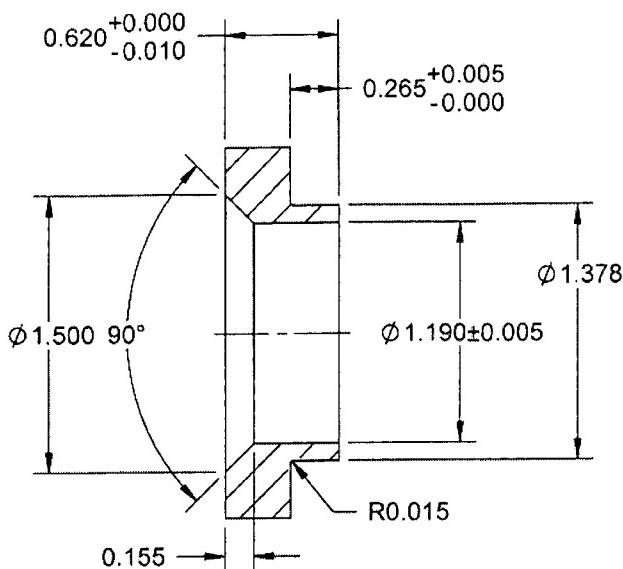
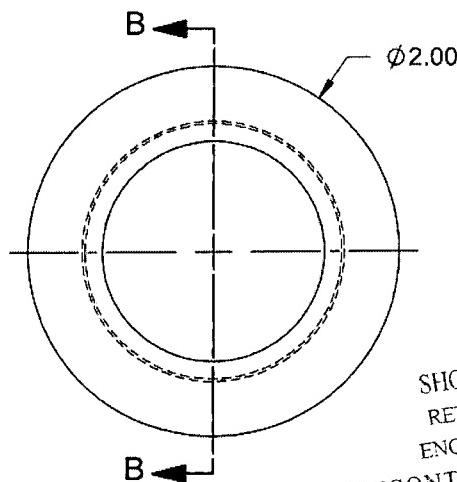
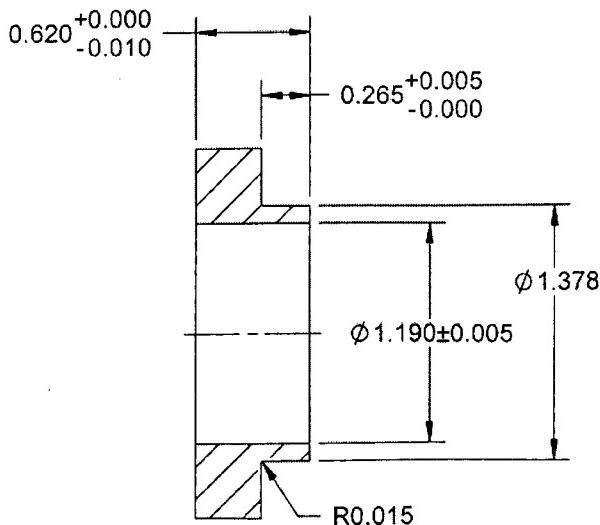
05.03.08

TITLE

WHEEL ASSEMBLY

SCALE

1:1

**SECTION A-A****D3233-1 INSIDE WASHER****SECTION B-B****D3233-3 OUTSIDE WASHER**

SHOP COPY  
RETURN TO  
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*37649*

**NOTES:**

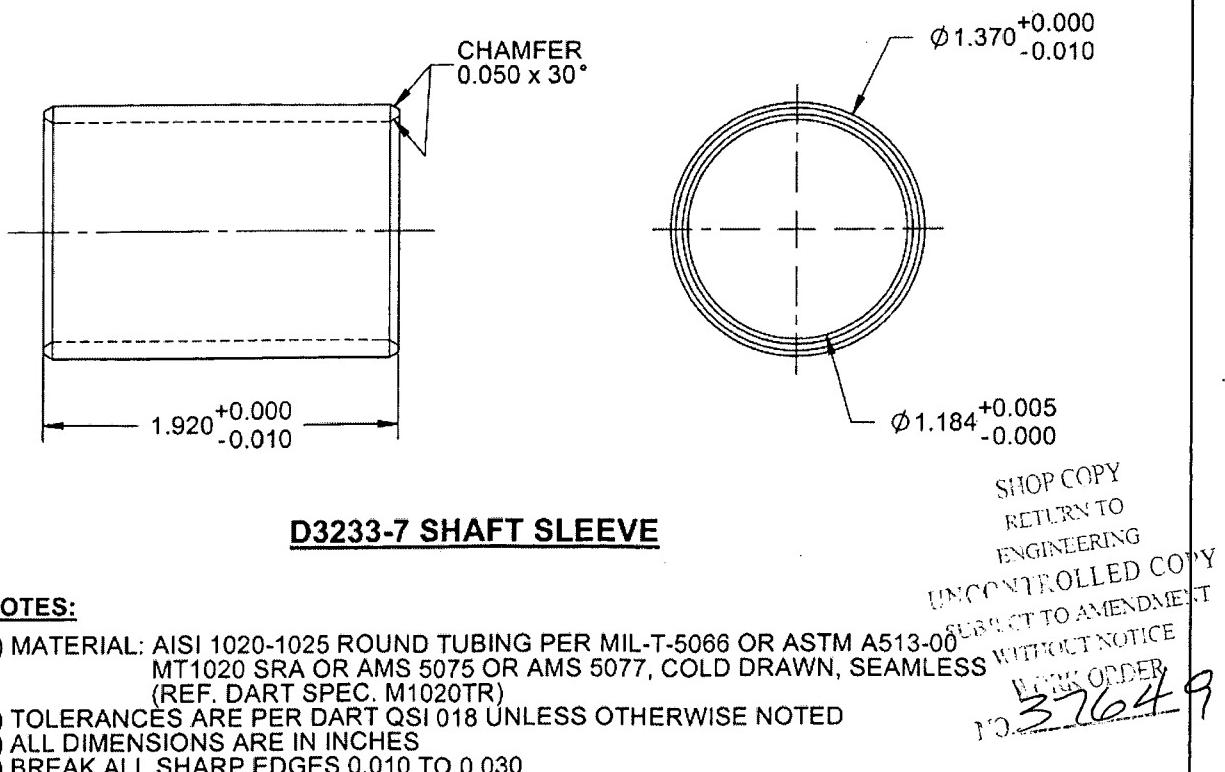
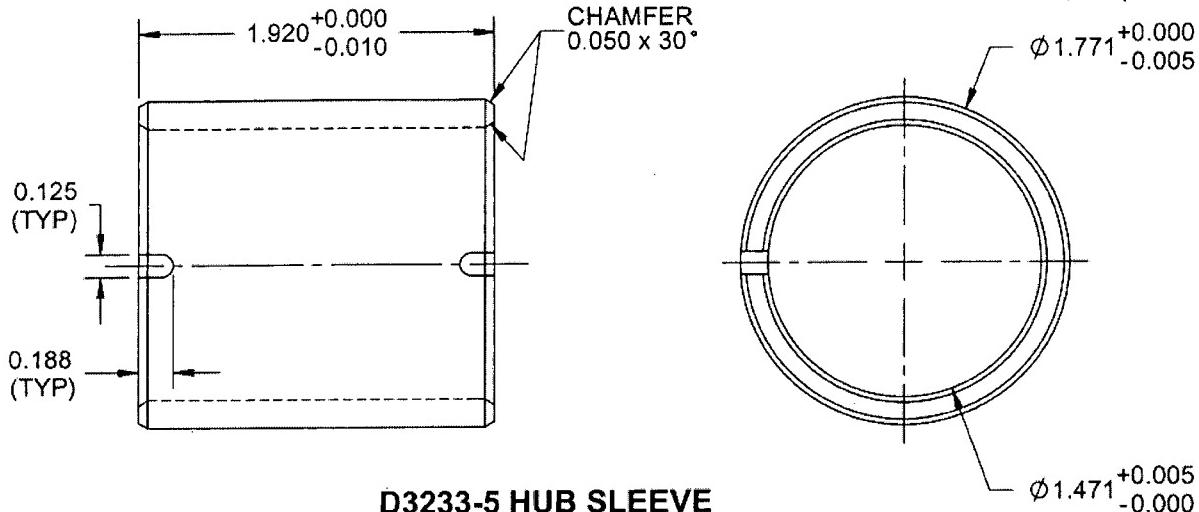
- 1) MATERIAL: AISI 1020-1025 ROUND TUBING PER MIL-T-5066 OR ASTM A513-00  
MT1020 SRA OR AMS 5075 OR AMS 5077, COLD DRAWN, SEAMLESS  
(REF. DART SPEC. M1020TR)
- 2) FINISH: POWDER COAT FIRE RED (REF. 4.3.5.10) PER DART QSI 005 4.3
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.010

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| CHECKED | APPROVED | DRAWING NO.                                       | REV. B       |
| RJ      | WPS      | D3233   | SHEET 3 OF 3 |
| DATE    | 05.03.08 | TITLE   | SCALE        |
|         |          | WHEEL ASSEMBLY                                    | 1:1          |

**RELEASED**  
*[Signature]*  
05/05/04

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# McMASTER-CARR®

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Aurora, OH 44202-8087  
330-995-5500  
cle.sales@mcmaster.com

Dart Aerospace Ltd  
1270 Aberdeen St  
Hawkesbury ON K6A 1K7  
Canada

Purchase Order  
PO00005796

Page 1 of 1

McMaster-Carr Number  
6763675-02

02/27/2008

| Line | Description   | Ordered    | Shipped |
|------|---|------------|---------|
| 5    | 4146A93 1/2" Hex Shank Arbor for 1-5/16" to 2-9/16", Hole Cutter for Sheet Metal                          | 1<br>Each  | 1       |
| 1    | 9504K17 Brass Shim Stock Roll, .004" Thick, 6" Width X 60" Length   | 3<br>Each  | 3       |
| 2    | 2458K14 Carbon-Fiber Race Ball Joint Rod End, 3/8"-24 Right-Hand Male Shank, 4012 Pound Load Capacity     | 10<br>Each | 10      |
| 3    | 8353T74 Pneumatic Wheel with One-Piece Rim, 18" X 5.9", center Hub, 1-1/4" Axle, Roller Bearing, 1590#cap | 12<br>Each | 7       |

3 - 54 - 13 66 - 25 A93

1 EA

3 - 262

3 - 297

8 - 79

Shipped separately from our Chicago warehouse on 02/27

|   |   |
|---|---|
| 3 | 8353T74 Pneumatic Wheel with One-Piece Rim, 18" X 5.9", center Hub, 1-1/4" Axle, Roller Bearing, 1590#cap |
| 4 | 4146A38 Hole Cutter for Sheet Metal, 2-1/4" Diameter, Tin Coated  |

12  
Each 5  
  
1  
Each 1



Dart Aerospace Ltd

Assembly  
Area

88

Cycle

30

Shelf

801

Documents

4

EXP



110 lbs  
4 lines

FW1BSP38  
02/27/2008  
10:48/11:02  
282



8005939689192